

## DRYING WOULD SAVE WASTE OF PRODUCE

Saving to Consumers Would Be Big Economic Factor, It Is Declared.

## GERMANS LEAD THE WAY

New American Process Surpasses All Others, However, in Saving Flavor.

Fifty thousand dollars was cast into the Atlantic the other day by officials of the Department of Health. To be specific, something like 2,000,000 overripe oranges were destroyed because they were not fit for sale. Thus 250 tons of foodstuff from Porto Rico and Jamaica were lost after having been brought a long distance at a considerable outlay.

Again, not long ago 3,300 bags of onions were thrown into San Francisco Bay because they had deteriorated in the warehouses and could not be sold. If searched the newspapers would show that these instances are but two among many thousands of similar cases of market losses. They give an inkling of the enormous waste in produce that goes on in the United States annually, and all because green vegetables and fresh fruits will remain edible so long and no longer. The ultimate consumer pays for this wastage. The loss could be prevented if part of the moisture in the fruits and vegetables could be eliminated without injuring them.

### Housewife Pays for Water.

The public is scandalized when watered stock figures in the realm of finance, but it has been putting up with something much akin to it in the matter of foodstuffs. The housewife has purchased heavily of water when she thought she was getting a full measure of nourishment.

Take, for instance, the wheat from which our daily loaf comes. As the farmer ships his grain to the elevator 20 per cent of the wheat is contained water. In other words, out of five carloads of wheat the moisture present is equivalent to one carload of water. Freight is paid on that water at the same rate as for the transportation of the grain and the ultimate consumer foots that bill when he buys his barrel of flour. Not only that but the baker's loaf—sold by weight—is 35 per cent water.

### Consumer Pays Toll.

The average citizen does not realize it, but his watered foodstuffs are levying toll upon him all along the line. It is that moisture content that invites deterioration and decay and but for the icebox—the upkeep of which means a tidy annual outlay—spoiling and waste would cost still more. Trace the story back. The marketman has to contend with the same conditions; a goodly percentage of his stock wilts and deteriorates upon his hands because of the trouble breeding moisture; and what he sells must bring a higher price in order to fetch a general profit. The wholesaler is confronted by the same problem, because he has to pay charges for transportation, cover depreciation in transit, and sell at prices that will insure a balance on the right side of his ledger.

### Applies to Farmer, Too.

Again, the farmer must ship only the very best of his produce in order that his perishable wares may stand reasonably well their journey to the markets. As a result, when his fruits and vegetables ripen overabundantly he must count broadly as a loss that part of his harvest which remains on his hands. He must get enough from his sales to pay for this wastage and the ultimate consumer sighs at the prices thus made necessary.

A possible remedy for this state of things lies in a process recently perfected in this country that makes it practicable to dry fruits and vegetables without impairing their palatability and their natural nutritive values. The hard pressed Germans have already been doing something in this direction.

### Germans Sought Solution.

Some years ago the Germans turned their minds to conserving surplus farm products, and in a way they sought to imitate nature, who taught primitive man how things would keep when well dried by the sun or by fire. Briefly, their method consists in partially cooking or parboiling the vegetables and then drying them sufficiently to prevent subsequent deterioration or fermentation in storage. Rebelling is necessary to prepare these vegetables for the table. Now twice cooked food is somewhat rich, and not only that, there is a decided loss in nutritive value. Palatableness has a lot to do with digestibility.

### Good Silage Crops.

The best and the potato were the two vegetables that the Germans worked with on a large scale originally. Later they took up the drying of beet tops, potato tops, peas, and grains for the feeding of domestic cattle.

Drying to preserve and drying merely to produce a sense of dryness are two entirely different things. The housewife knows this when she bakes bread too quickly.

The process for drying vegetables referred to as having been developed in this country is the work of Waldron Williams, Woodford Brooks and Dr. F. G. Wichmann. Mr. Williams tells the story of the work of himself and his associates.

"I never realized how little was known about the art of drying until my attention was attracted to it as a field of commercial effort," he said. "I turned to my fellow alumni at Columbia and hunted high and low in the technical libraries, but when it came to practical details none of these sources of information was of material aid."

### German Patents Showed Little.

"The German patents disclosed some things, but half of any process patent is the secret of application, and the German drying experts were not taking the public into their confidence. Finally we decided to make our own experiments, and something like two years ago we hit upon the working principles of our method."

"Before our plants were working

for the market at Middle River, Cal., Round Brook, N. J., and Webster, N. Y., it occurred to me that it might be well to visit Germany for the purpose of seeing how our products compared with those turned out by the factories of the Fatherland. I went fortified with letters of introduction to the foremost of those establishments, and logically I chose to make my first call upon the managing director of the most noted of the vegetable drying companies.

### Was Well Received.

"He received me in a very handsomely appointed office, bearing all the hallmarks of commercial success, and courteously asked me to explain the object of my visit. I did this briefly. At once the Herr Direktor waved his hand deprecatorily and expressed his sincere regret that I should come so far to lay before him anything that pertained to the art of drying. 'I could have saved you the trip, Mr. Williams, because we know all there is to know about drying and improvement is quite impossible,' he said."

"Naturally I was not disposed to linger, neither was I inclined to display my samples, but the alert Herr Direktor had seen that I had some, and more out of politeness than anything else expressed a desire to see them. It was plain that he was at once interested, and before long he had six or seven of his technical associates summoned to the office, and they too were impressed."

### Offered to Buy.

"The Herr Direktor dismissed them, and when the room was cleared, turned to me eagerly and said: 'Mr. Williams, name your price. I did not look like your samples.' As our patents were then pending in the German patent office I was not prepared to come to terms, but I left that establishment satisfied that we Yankees had forged a long way ahead in a very difficult art, and I realized that we had the solution of a vexing economic problem—the utilization and the preservation for subsequent consumption of millions of tons of vegetables and fruits that would otherwise go to waste."

"How well we have succeeded in retaining the natural flavor of fresh vegetables is evidenced by the testimony of a New York housekeeper, a friend of mine. Merely to satisfy her curiosity I sent her a package of our dried spinach. The next time I saw her she said: 'Why, Mr. Williams, that spinach was actually fresher than the green stuff that I buy at my grocer's.' Naturally, because that spinach was dried inside of eight hours from the time it was picked, while the provision store was selling spinach anywhere from a week to ten days old."

### Treated When Fresh.

"We treated the vegetable when it was succulent and fresh and full flavored. The store articles had been deteriorating for days before it was cooked."

"The Department of Agriculture is the authority for the statement that not less than 50 per cent of the fruits and vegetables grown in the United States never reach the consumer. Of course, a very large part of the wastage is in the form of fruit, but from the standpoint of conservation of foodstuffs it seems almost criminal when one considers the enormous quantities of vegetables which are yearly either plowed into the ground or thrown away or destroyed because the price does not warrant the farmer in shipping them to the market."

### Can Be Preserved.

"Why shouldn't these products be so conserved that they would keep indefinitely and be welcome upon any table? It is possible by our drying process to preserve these fruits and vegetables in forms that are bound to be a boon to the housewife and a comfort to the family purse. Our dried products, for instance, can be sold at a lower price than the normal retail market price for green stuffs, and we should only find fresh vegetables formidable competitors when there is an overabundance. But then, however, would be the time when we could buy and dry most economically, and by thus conserving the surplus it would be possible to maintain a general balance in the foodstuff market."

"The Government experts declare that of the potatoes in domestic use something like 25 per cent of their weight is wasted in paring and that there is a further loss of 15 per cent owing to deterioration and sprouting in storage. I know as a fact that quite 10 per cent of our potatoes are wasted on the farm in the form of what is known as culls—potatoes injured in digging or those that do not quite come up to the market standards."

### Potato Flour Possibilities.

"With plants suitably located, a very large share of these culls could be dried and made into potato flour, which is good for bread, soups, pancakes and a filling in certain textures."

"A pound of our dried, mixed vegetables prepared especially for soups will make enough to serve sixty or more adults. A barrel of the same vegetables, weighing 100 pounds, will furnish soup enough to feed nearly 7,000 persons. The raw vegetables before drying would fill at least thirty barrels and weigh probably more than 1,500 pounds."

"We are shipping these goods abroad at the present time. Indeed, in the places the men otherwise would not be able to have fresh vegetables. Anyone with half an eye to economy will appreciate what this saving in weight and bulk means. Transportation charges are accordingly lower. For military expeditions and naval operations covering protracted periods nothing could be better or more satisfying to the men."

## Painless Dr. Smith—The People's Friend

Don't be backward—come right along to Dr. Smith and tell him your teeth troubles. You will find him kind, gentle, and courteous; and his charges for superior painless dental services are way below what you expect to pay. He will arrange easy payment terms if you need them.

**Easy Payment Terms to All**  
Sets of Teeth...\$5.00 up  
Gold Fillings...75c up  
Silver Fillings...50c up  
Gold Crowns...\$3, \$4, \$5

**Dr. Smith Dentists (Inc.)**  
Cor. 7th and E Sts. N. W.

Over People's Drug Store. Open Daily, 8 a. m. to 8 p. m. Sunday, 9 to 2. Reference, Second National Bank. Lady Attendant.

## SUNSET MATTER OF INTRICATE FIGURES

Even Official Calculation of Time Show Eight Minutes Variation.

## BOTH TABLES ARE CORRECT

Difference Depends Upon the Use of Standard or Local Time.

What time does the sun rise in Washington? What time does it set? When it's up, and when it's down, might suggest itself to the facetious, but the automobilist who must have his lamps lighted by half an hour after sunset, does not appreciate any dippyancy on the subject.

Consequently he generally watches the weather tables in the newspapers for this information, gleaned from official sources. But, there's the rub. He may see in one of the morning papers that the sun sets at one time, while in The Times he will probably see that it sets just eight minutes later, giving him eight minutes of grace. How in Sam Hill, he asks, can official tables on the subject disagree? Is some one careless printing them? And not finding a ready answer to his first inquiry, he is inclined to believe that the latter is the case.

Discrepancy Explained. But such, gentle reader, is far from the fact. Official tables of the Coast and Geodetic Survey say that the sun will rise in Washington in a given day, at a given hour. For the same day official computations from the Naval Observatory will have the sun rising probably eight minutes later, and setting eight minutes later.

Both are correct officially. But there is this difference. The Naval Observatory computation is based upon standard time. The Coast and Geodetic Survey table, unless it happens to be an especially prepared one, is based on local time.

Contrary to general belief, standard time and local time are not the same in Washington, though a lot of official scientific records and time computations are based on the meridian of Washington.

Consequently, if you read the Coast and Geodetic table of sunrise and sunset, it will not be correct, according to your watch, or the family clock, as nearly all of them are set by standard time in Washington, which runs eight minutes ahead of the sun.

Philadelphia, being eight minutes in longitude east of Washington, is the only city using eastern time that does not have to make an allowance in records of this sort between standard and local time, as they are the same.

It is, when the sun is directly on the meridian of that city. Why, you may ask, are the tables not put in standard time, the time that everybody uses, so there would be no possible confusion. Prof. W. S. Eichlberger, director of the department of the nautical almanac of the Naval Observatory, and Dr. E. Lester Jones, superintendent of the Coast and Geodetic Survey, answer that it is impossible. In other words, it can't be done, simple as it may seem to you, and as simple as it seemed to the poor reporter. He asked why it was not possible to take all of the cities in the longitude of eastern time, and set the sunrises for them by their longitude, and then put it all down in standard time. And I'll bet you never thought of the answer either?

It was patiently explained that the sun does not rise at the same hour in two cities that may be on exactly the same degree, or line of longitude. Latitude makes a difference. Don't you remember reading, in your old geography, if not later, how long the days are in northern countries in spring and summer? And how short they were in winter? The declination of the sun makes the difference, if you know what that means.

### Varies With Latitude.

For instance with the sun north of the equator, the sun rises earlier at any point on the longitude of Washington, in far-off Canada, than it does in the Capital, and sets later. In the fall and winter, with the sun south of the equator it is just the reverse. Therefore, the time of sunset and sunrise, depends upon latitude, as well as longitude, or the two combined, and it is necessary to figure the latitude and longitude of every place to get the time straight. As time depends on longitude, of course the figures secure are always local time figures, and it is not possible to print a volume large enough to carry a separate table for every community, and they cannot be grouped by standard time.

In other words—if you don't get it that way—after figuring the exact time by longitude that the sun will rise at the equator, the center line dividing the earth into north and south hemispheres, it is necessary to add to or subtract from this figure as you move north and south, the ratio of the declination of the sun, or its position north or south of the right angle plane of the earth. But

then, perhaps, that's worse, but it's right.

### Compelling Elaborate Tables.

Because of this, the Naval Observatory has prepared, and soon hopes to have ready for distribution, a set of tables of sunrise and sunset in all of the principal cities of the United States. They are necessarily stated in local time, which in few instances is standard time. But with the table will go a table of allowances to be made in the various cities between local and standard time. That is, each city will be told how many minutes to add or subtract, to get the correct sunrise and sunset figures, according to their timepieces.

The Coast and Geodetic Survey gives a comprehensive chart by which the sunrise and sunset in any spot on the earth can be figured, but it is not readily assimilated by the lay calculator, who has to look up latitude and longitude figures to make the proper addition or deduction from the printed tables. But then these tables are printed primarily for the benefit of mariners who know all about latitude and longitude, declination of the sun and logarithms.

There is another feature about the sunset that may puzzle you. You may see the sun full in the sky some time, when, officially, by an accurate chronometer, it has set. Many visitors at Fort Myer have commented on the fact that the sunset gun is fired there, while the sun is still streaming down on the parade ground.

### Variation Again Explained.

Science accounts for it easily, however. The scientists figure the sunset as the time the upper limb (half) of the sun dips into the sea or goes behind the plane, or mean level of the earth to an eye fifteen feet above the sea, or the mean plane or average level of the earth.

If you are standing on an eminence like Fort Myer you are considerably above the plane of the earth, and you can see the sun when it has set, on the earth's plane, or down on the level. Likewise the sun may set behind a mountain, and it may be officially set in the valley you may happen to be in. And if you are on the mountain, the sun sets much later than it would otherwise. Of course, this applies to the sunrise, too, but not many city folks generally see the sun rise.

### Police Not Wove Tight.

Automobilists might take heed of the fact that tables on sunset at police headquarters, which are telephoned each day to precinct forces throughout the city, are compiled by the Naval Observatory on the basis of standard time, so it will not do to tell the policeman that his old table is not running by his watch.

The police table is, however, a perpetual table—that is not corrected each year—and may show some little variation, as much as one minute at the maximum, a mighty small loop-hole.

### TELLS OF BRILLIANT AGE.

Columbus and his contemporaries were pictured as men whose places in history are secure, in a lecture by James J. Walsh, educator, psychologist, and historian at the National Theater last night, under the auspices of the Knights of Columbus. This was the first of a series of lectures by the organization.

There were more great men alive, doing wonderful things, than there ever to be forgotten, during the time of Columbus, the speaker said, than at any other time in the world's history. He mentioned among these immortals Copernicus, Raphael, Leonardo da Vinci, Michael Angelo, Titian, Fra Angelico, Botticelli, the Bellinis, Fra Lippo Lippi, Correggio, and Tintoretto.

## TAX ON PROFITS IS URGED FOR 1918

Democratic Revenue Bill Embraces Levy on All "Velvet" Above 8 Per Cent.

## START DRAFT TOMORROW

Revision of Inheritance Tax With 50 Per Cent Increase Is Also Expected.

If you make more than 8 per cent in business you are likely to meet a special Government tax on "excess profits" at the beginning of the calendar year 1918. The forthcoming Democratic revenue bill, according to reliable information today, will levy a tax on such profits. This will be in addition to the income and corporate taxes.

Democratic members of the Ways and Means Committee will meet tomorrow to start the draft of the new revenue bill, which must be passed at this session if the Treasury vaults are to be refilled. After discarding numerous suggestions, it was learned today that the Democratic leaders in the House, after consulting with Secretary McAdoo, have practically decided to draft a bill along the following lines:

Regarded As Excess. A tax of 5 to 8 per cent on all "excess profits," and all profits above 8 per cent on the investment are to be regarded as "excess."

Revision of the inheritance tax, with an increase of about 50 per cent in existing rates.

Sale of all Panama Canal bonds, amounting to about \$231,000,000.

Issuance and sale of \$500,000,000 in short-term Treasury notes, maturing in sixty to ninety days, at 3 per cent interest, to meet Treasury needs for the lean months of the present fiscal year (April to July). These notes probably will be called "bills of exchange," and are to be promptly redeemed.

Shall Be Redeemed. It is contemplated that these Treasury notes shall be redeemed as quickly as possible after July 1, when the annual returns from the income tax and other internal revenue taxes will begin to reach the Treasury. It is estimated the Treasury will receive several hundred million dollars during the month of July. During the months of April, May and June, it is said, there will not be sufficient money in the Treasury to pay current bills, and the short-term notes must produce this revenue.

The plan of the Administration leaders is that the tax on "excess profits" shall run with the calendar instead of the fiscal year, and this new tax will not go into effect until January 1, 1918.

Tentative Tax Agreed On. A tax of from 5 to 8 per cent on all excess profits above 8 per cent is the tax tentatively agreed upon by the Democrats of the House Committee who have had under advisement various revenue-raising plans.

The basis of the new revenue bill

will be a higher inheritance tax and a new levy on "excess profits," the latter being patterned somewhat after the English tax.

### To Take Precedence.

The revenue bill is expected to take precedence in the House as soon as the appropriation measures are out of the way. Democrats say it is imperative that a revenue bill shall be passed at the short session, and the Administration forces in both houses will be set to work preparing the way for the easy progress of the measure through Congress before March 4.

The more influential Democratic members of the Ways and Means Committee have conferred with Secretary McAdoo over the outlook, and it is said the Administration will give its support to a revenue bill embracing the features named. The Ways and Means Committee will draft the bill within the next few weeks, possibly within the next few days. An initial conference of Democratic members of the committee will be held Tuesday morning.

It is authoritatively said that there is now little prospect of a revision of the income tax rates. Suggestions of a "consumption tax," a higher tax on beer and liquors and a horizontal increase in import duties have been practically abandoned.

## QUESTIONS DRY BILL

Dr. Wiley Advocates Temperance, But Not Prohibition.

Dr. Harvey W. Wiley, America's foremost pure food authority, is a "teetotaler," but he stepped into that class voluntarily, and not because of any stringent liquor legislation.

In an address on "Temperance," delivered at the Fifth Baptist Church, last night, Dr. Wiley told of the harmful influence of Congress in refusing to listen to the voice of the citizens of the District when local legislation is before that body.

"If Congress should vote as it really feels on the matter," he continued, "there would be no prohibition in the District. Regard for the citizens of the District influences the men on Capitol Hill to a very small extent."

"Every man should be a teetotaler of his own free will, but it is a question of whether we have a right to regulate another man's private life."

### NEW EASTERN STAR CHAPTER.

The consecration of Unity Chapter, No. 22, of the Eastern Star, whose petition for a charter was granted last Thursday, was the business of the session of the grand chapter at the Scottish Rite Cathedral, Third and E streets northwest. The ceremonies were conducted by Worthy Grand Matron Ida V. Faber and Grand Patron Ben W. Murch. Mrs. Emma C. Oebbeck, of Michigan, worthy grand matron of the general grand chapter, installed the officers. Miss Maude E. B. Wright was the soloist. Under the direction of Charles S. Hyer the choir gave special music.

### RELIGIOUS MOVE IN FRANCE.

Jean A. Picard, who came from the French trenches for a lecture tour of America, told a congregation at the Church of the Covenant yesterday afternoon that a wave of religious sentiment is sweeping over France on the wings of war. "France is turning more to the spiritualistic, and the generation is turning more to the church," the speaker said. Mr. Picard said the French clergy is doing its share of the fighting.

## FIGHT ON LUMBER DISEASE PLANNED

Arrangements for Campaign to Be Taken Up at Conference This Week.

Plans for fighting the spread of the white pine blister disease, which threatens the destruction of white pine timber valued at \$300,000,000, will be the principal subject of consideration at the international forestry conference to be held at the Willard Hotel on Thursday and Friday.

Delegates, more than 300 of them, will begin arriving for the convention tomorrow. They will come from every State and Territory and from the Dominion of Canada, being appointed by the governors of the States and Territories and the provinces of Canada.

Canada alone will be represented by more than a score of its best forestry experts. Charles Lathrop Pack, president of the American Forestry Association, and one of the best known foresters in America, will preside at the sessions of the conference.

The conference will be called to order on Thursday morning at 10 o'clock, and after a short business session the main subject of the conference will be taken under consideration.

### SEA FIGHTER REPAIRED.

NORFOLK, Va., Jan. 15.—The six-foot chunk that was torn out of the starboard stern of Uncle Sam's big battleship, the Delaware, December 23 is completely repaired today and the fighter is ready for the sea again. She was rammed by the naval tug Sonoma, whose bow also was badly damaged.

## CASTORIA

For Infants and Children In Use For Over 30 Years

Always bears the Signature of

Dr. J. C. Watson

Globe-Wernicke

The Globe-Wernicke Co.

1218-1220 F Street

Telephone M. 7604

# Do You Know Why This Label Cuts Food Costs?

YOU have read in previous issues of this paper some of the ways in which Armour is working to keep down your living costs. But there is *another economic advantage* which Armour offers you—to your resulting benefit.

And that is in the preparation and marketing of a broad assortment of highest quality food products *under one brand*—the famous *Armour Oval Label*—which divides the manufacturing and selling expense among many products, and thus makes for *lower prices on fresh meats and all that Armour sells.*

Instead of marketing a *single commodity*, the same manufacturing organization and the same selling force market *over three hundred food products* at practically the same *fixed overhead charges.*

So that by utilizing an *already established organization*, the same Armour system that brings you your fresh meats most economically, also brings you, under the Oval Label, a multitude of other appetizing, nutritious foods at the *lowest possible selling expense* and hence, the most reasonable prices to you.

The Armour Oval Label is not only a *trade mark*, but a *grade mark*. It stands for both purity and quality; but it also stands for *value*—the surety that you are getting *top-most grade*, whatever Armour product you buy.



**ARMOUR AND COMPANY**  
CHICAGO

For only America's choicest foods are packed under this protecting brand—Star Stockinet Ham, Star Bacon, *Verifast* Package Foods, "Simon Pure" Leaf Lard, Grape Juice, Cloverbloom Butter, *Verifast* Eggs, Glendale Oleomargarine (natural color), Silver Churn Oleomargarine (white), *Verifast* Canned Vegetables, Fruits and hundreds of other palate-tempting foods.

Look for the Armour Oval in blue and yellow on dealers' store fronts, and on the packages in their windows and on their shelves.

It identifies the *utmost* in food products, selected from top quality at the source of supply, prepared in sanitary plants under official inspection, brought to you under *ideal temperature* in the most efficient way and at *fairest prices.*